

What is claimed is:

1. Removing from a retinal image acquired by a fundus camera, image degradations arising from intraocular defects, comprising the steps of:

- a.) digitizing said acquired image;
- b.) taking an FFT of said digitized image by rows and columns;
- c.) correlating said FFTs to obtain resultant row product vectors and column vectors;
- d.) finding the root equal to the respective numbers of rows and columns of the resultant row and column product vectors to obtain quotients;
- e.) subtracting from each of said quotients a minimum offset term to obtain the PSF spatial spectrum (MTF) of the eye;
- f.) dividing each row FFT and each column FFT by said MTF; and
- g.) taking the inverse FFT to yield a restored distortion-reduced image.

2. The method of removing from an acquired image degradations arising from optical defects in inaccessible portions of the optical path, comprising the steps of

- a.) digitizing said acquired image;
- b.) scanning said acquired image along predetermined paths to obtain vectors of data;
- c.) taking a discrete transform of said vectors of data;
- d.) correlating said discrete transform of said vectors to obtain resultant product vectors;
- e.) finding roots of the resultant product vectors for each of said predetermined paths ;
- f.) subtracting from each of said roots a minimum offset term to obtain a point spread function spatial spectrum (MTF);
- g.) dividing each discrete transform of said vectors by said MTF; and
- h.) taking the inverse discrete transform to yield a restored distortion-reduced image.

3. The method of claim 2 wherein said acquired image is a retinal image acquired by a fundus camera.

4. The method of claim 3 wherein at least one of said predetermined paths
5 traverses a predetermined feature of said retinal image.

5. The method of claim 3 wherein said discrete transform is a fast Fourier transform.

6. The method of claim 4 wherein said predetermined paths are row and
10 column paths of said image.

7. The method of claim 5 wherein there are N of said predetermined paths and
said root is the Nth root of said product vectors.